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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,912	12/09/2003	Shin-Jen Wang	BP3035.S7-P3	2409
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SALLY CHANG 7F, NO. 3, ALLEY 32, SEC. 6 CHUNG-HSIAO EAST RD. TAIPEI, TAIWAN, R.O.C. 115 TAIPEI, 115 TAIWAN			EXAMINER AFZALI, SARANG	
			ART UNIT	PAPER NUMBER
			3729	

DATE MAILED: 01/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/734,912	Applicant(s) WANG, SHIN-JEN	
	Examiner Sarang Afzali	Art Unit 3729	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9,10 and 12-26 is/are pending in the application.
 4a) Of the above claim(s) 16-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9,10,12-15 and 20-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Species II, claims 9-10 and 12-15 in the reply filed on November 07, 2005 is acknowledged.
2. Newly added claims 20-26 are also readable on elected Species II.
3. Claims 1-8 and 11 have been cancelled.
4. Claims 16-19 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Specification

1. The disclosure is objected to because of the following informalities:
Page 7, line 10, of specification the phrase "polyester urine resin" seems to be misprinted.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
3. Claims 20-22 and 26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to

Art Unit: 3729

which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Page 11, lines 2-6 of the specification, the phrase "Further, in second stage, the heating box 52 can be changed as many sets of heating and pressing rollers necessary." is very confusing and unclear as to how "heating box 52" can do that. Furthermore, the phrase "besides, a plurality of press rollers or a plurality of heating sections can be used in the present invention so that the PU film 51, PU gel 37 and fastener strips 11, 12 have an optimum combining effect.", in addition to Fig. 8 in particular, one can conclude that the above statement seems to be suggesting that multiple roller stations and heating stations can be added in the assembly line as needed in order to provide an optimum bonding between the PU film, PU gel and fastener strips 11 & 12. In this case, the same PU film 51, PU gel 37, and fastener strips 11 & 12 are going through multiple rolling and heating stations.

As applied to claims 20 & 21, note that in claim 20, the limitation of "step (e1)" which occurs after step (e) and in claim 21 the limitation "steps (e) and (e1) are repeated through predetermined times" seem to teach that by repeating step (e) an additional layer of PU film (51) is introduced to the assembly line. In addition, note that PU film (51) is recited for the first time in step (e) of claim 9, therefore, it is understood that every time step (e) is repeated, then a new and different layer of PU film (51) has to be added on to the assembly line. It is noted that there is no teachings anywhere in the disclosure for the above limitation in such a way as to enable one skilled in the art to

Art Unit: 3729

which it pertains, or with which it is most nearly connected, to make and/or use the invention.

As applied to claim 26, the limitation of “wherein, before step (e), the PU film is pressed at two sides” teaches that PU film (51) which is recited for the first time in step (e) somehow has to be pressed at two sides before it is further pressed and adhered to the PU gel and fastener strips by rollers in step (e). It is noted that there is no teachings anywhere in the disclosure for the above limitation in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 9-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As applied to claim 9, steps (c) & (f) recite drying and heating steps which Applicant seems to regard as the invention. However, the claim language reads broadly and can be read that both steps can be done in one heating step as claimed. Suggestion is made that applicant clearly identify the second heating step in addition to the first drying step.

6. Claim 9 recites the limitations “the fastener strip”, “the fastener strips”, and “the two fastener strips” in lines 3-6 and 11. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 9 & 26, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Norvell (US 5,386,616) in view of Press (US 6,105,214).

As applied to claim 9, Norvell teaches a method of producing a water resistant zipper (10, Fig. 1) with fastener strips (stringer tapes 12, 14, Fig. 1) coated (col. 5, lines 6-8) with polyurethane (glue/PU gel coatings 32a, 32b, 34a, 34b, Fig. 1) on both front and back sides wherein the PU gel is pressed into the fastener strips by capillary effect to improve water resistance and serve as an adhesive (col. 4, lines 55-68) to attach PU film (sealing tape 36, 38 with adhesive layer 42a, 42b and water resistant sheet 40a, 40b, Fig. 1) to the backsides of the fastener strips (12, 14, Fig. 1) to form a waterproof zipper.

Norvell teaches the invention cited with the exception of explicitly disclosing the "feeding a nylon zipper", "drying box", "using roller to adhere PU film with PU gel", "'cutting the waterproof layer", "heating the PU film and PU gel", and "guiding out the waterproof zipper".

Press teaches a process of making water resistant slide fastener (Zipper) wherein a nylon zipper (slide fastener 10 with slide fastener structure 12 including nylon stringer tapes 14, 16, Figs. 1 & 2, col. 7, lines 7-11) is fed by a feeding device (24, Fig.

Art Unit: 3729

2) to a laminating assembly (30, Fig. 2) wherein rollers (34, 36, Fig. 2) press and attach a water resistant PU film (26, Fig. 2) to the back of the slide fastener structure (12, Fig. 2) resulting in a laminated waterproof zipper (38, Fig. 2) which is subsequently fed to a treating station (40, Fig. 2) which is both a heating (drying) and/or cutting station (Figs. 2 & 3) to both cure and/or cut the PU film (26, col. 7, lines 22-33) and subsequently guided out (Fig. 2) to provide excellent resistance to passage of water through the gripper structure (22) of water resistant slide fastener (10, col. 7, lines 34-37).

It would have been obvious to one of ordinary skill in the art at the time of invention, to modify Norvell with the teachings of Press to provide an effective water resistant slide fastener.

As applied to claim 26, Press further teaches that rollers (34 & 36, Fig. 2) press PU film (26, Fig. 2) at two sides.

9. Claims 10 & 20-23, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Norvell and in view of Press and further in view of Klein (US 2,768,922).

As applied to claim 10, Norvell/Press teaches the invention cited with the exception of extruding step after the heating step. However, Klein teaches a method of manufacturing a waterproof slide fastener (16, Fig. 4) wherein a PU film (thermoplastic film 24, Fig. 6) is adhered on the back of slide stringers (17, 18, Fig. 4) of a slide fastener (16, Fig. 4) and fed through heating station (heating roller 32, Fig. 6) and extrusion station (extruded by heating roller 32 and pressure roller 33, Fig. 6) and

Art Unit: 3729

further extruded by cooling rollers (34, 35, Fig. 6) and guided out by winding rollers (37, 38, Fig. 6) in order to produce an article formed by a film resin and the slide fastener with superior qualities of resistance to tensile strain (col. 3, line 71, col. 4, lines 1-4). It would have been obvious to one of ordinary skill in the art at the time of invention, to add extrusion step to Norvell/Press in light of the teachings of Klein in order to produce an article formed by a film resin and the slide fastener with superior qualities of resistance to tensile strain.

As applied to claims 20 & 21, Norvell/Press teaches the invention cited with the exception of a predetermined step of rolling (steps e1, e2, ...) after first rolling step (e). However, Klein teaches multiple rolling steps wherein a PU film (thermoplastic film 24, Fig. 6) is adhered on the back of slide stringers (tape portions 17 & 18 made from tape 30, Fig. 4, col. 11-14) of a slide fastener (16, Fig. 4) at first rolling station (rollers 32, 33, Fig. 6) and then fed to second rolling station (cooling rollers 34, 35, Fig. 6) and fed to third rolling station (winding rollers 37, 38, Fig. 6) in order to produce an article formed by a film resin and the slide fastener with superior qualities of resistance to tensile strain (col. 3, line 71, col. 4, lines 1-4). It would have been obvious to one of ordinary skill in the art at the time of invention, to add multiple rolling steps to Norvell/Press in light of the teachings of Klein in order to produce an article formed by a film resin and the slide fastener with superior qualities of resistance to tensile strain.

As applied to claim 22, Klein further teaches that fasteners strips (slide stringers 17 & 18) are being dried by going through heating roller (32) and pressure roller (33)

Art Unit: 3729

and cooling rollers (34, 35, Fig. 6) in order to adhere and laminate PU film (24) to the fastener strips (slide stringers 17 & 18 part of tape 30, col. 2, lines 52-66).

As applied to claim 23, Klein further teaches that after heating step (by rollers 32 & 33, Fig. 6), another step (by rollers 34 & 35, Fig. 6) occurs wherein the PU film (24) with its adhesive backing and fastener strips (slide stringers 17 & 18 part of tape 30, Fig. 6) are further compressed from both sides in order to further solidify PU film on the fastener strips (col. 2, lines 65-67).

10. Claims 12-13 & 24-25, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Norvell in view of Press and further in view of Huang (US 6,676,534). Norvell/Press teaches the invention cited with the exception of forming printing patterns and textures on the PU film between steps (d) and (e) (claims 12-13) and forming the same printing patterns and textures (following step (b)). However, Huang teaches a manufacturing method wherein printing indicia (I) is formed on PU film (polyurethane layer P2 of strip S2, Fig. 22) and texture patterns (F) are formed on PU film (polyurethane layer P1 of strip S1, Fig. 22) to provide a decorative enhancement and to increase the hoop strength of the composite strip S (col. 5, lines 35-43). It would have been obvious to one of ordinary skill in the art at the time of invention, to have provided Norvell/Press with the processing steps as taught by Huang as an effective means of providing a decorative enhancement and to increase the hoop strength of the composite strip S (col. 5, lines 35-43). Note that step (b1) limitations of forming printing

patterns and texturing as recited in claims 24 & 25 are met by Huang wherein his forming steps occur after step (d).

11. Claim 14, as best understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Norvell in view of Press and further in view of Tolbert (US 6,579,403). Norvell/Press teaches the invention cited with the exception of the step of guide device and feeding device occurring between steps (d) and (e). However, Tolbert et al. teach a manufacturing process wherein fabric layers (52 & 56, Fig. 6) are fed by feeding device (50, Fig. 6) and passed to gluing device (60, Fig. 6) wherein PU gel (molten curable hot melt adhesive which can be polyurethane gel) is pressed into the fabric structure fabric (60 comprised of layers 52 & 56, Fig. 6) by use of capillary effect (having quick tack /green strength, col. 6, lines 47-66) and further cured in drying box (under atmospheric conditions, col. 6, 8-14) to secure multiple fabric pieces together (col. 12, lines 48-49) before taken by a guide device (68, Fig. 6) for further additional processing such as being fed to another station (col. 12, lines 37-43). It would have been obvious to one of ordinary skill in the art at the time of invention, to have provided Norvell/Press with the processing steps as taught by Tolbert et al. as an effective means of securing multiple fabric pieces together.

12. Claim 15, as best understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Norvell in view of Press and Tolbert and further in view of Klein. Norvell/Press as modified by Tolbert et al. teaches the invention cited with the exception

Art Unit: 3729

of the compressing step where the PU film, PU gel, and fastener strips are firmly combined occurring after a heating step. However, Klein teaches a method of manufacturing a waterproof slide fastener (16, Fig. 4) wherein a PU film (thermoplastic film 24, Fig. 6) is adhered on the back of slide stringers (17, 18, Fig. 4) of a slide fastener (16, Fig. 4) and fed through heating station (heating roller 32, Fig. 6) and extrusion station (extruded by heating roller 32 and pressure roller 33, Fig. 6) and further extruded by cooling rollers (34, 35, Fig. 6) and guided out by winding rollers (37, 38, Fig. 6) in order to produce an article formed by a film resin and the slide fastener with superior qualities of resistance to tensile strain (col. 3, line 71, col. 4, lines 1-4). It would have been obvious to one of ordinary skill in the art at the time of invention, to have added a compressing step to Norvell/Press/Tolbert et al. as taught by Klein in order to produce an article formed by a film resin and the slide fastener with superior qualities of resistance to tensile strain.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarang Afzali whose telephone number is 571-272-8412. The examiner can normally be reached on 7:00-3:30 M-F.

Art Unit: 3729

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S.A.
1/17/2006


MARC JIMENEZ
PRIMARY EXAMINER
1-18-06